

PART 4. Strategies to protect and get the most out of regional transportation facilities

4.1 Anticipate regional transportation needs for an undeveloped or new growth area

Objective: To develop a plan to implement needed transportation improvements based on anticipated growth within an undeveloped or newly defined, commercially-oriented growth area.

Description: First, a community should prepare a conceptual plan of how the area may evolve based on present zoning, comprehensive plan goals, and current market trends. Keep in mind other strategies that are part of an efficient transportation system (diversity of land use, reasonable commercial density, interconnection, etc.). Once a plausible growth scenario is identified, a regional traffic impact study should be conducted.

A regional traffic impact study describes how a development within a growth area is likely to affect the transportation system, and can also provide insight on how land use adjacent to the growth area may change as a result. Regional traffic impact studies can also be prepared for any development where traffic and anticipated land use impacts will affect more than one community, such as for big box stores, or large scale retail developments.

The MaineDOT reviews and issues permits for specific developments that generate more than 100 peak hour trips (2,000 sf convenience/gas store, 30,000 sf retail store). However, most communities can conduct their own regional traffic impact studies to best plan for how, where, and when development should occur within their designated growth area.

The following guidelines should be used:

- **Estimate Size of Development.** Using the plausible growth scenario, identify the order of magnitude acres or square feet of development that could be developed in the designated growth area.
- **Calculate Peak Hour and Daily Trip Estimates.** Using Institute of Transportation Engineers (ITE) standard trip generation rates and the square foot numbers from above, estimate the total peak hour and daily trip totals for the growth scenario. If the proposed growth area scenario will generate more than 200 peak hour trips (e.g. 130,000 sf of office space or 60,000 sf retail store), then the host community should initiate discussions with abutting communities during the development process. This may be as limited as coordination between town planner to more involved where joint municipal official meetings are held to scope out the study.

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- **Assess Impacts and Required Mitigation.** Based on trip estimates for the growth scenario, determine the impacts to the regional roadway network and identify needed mitigation, including cost estimates. This is generally done by performing level of service analysis at intersections and roadways within the region.
- **Plan for Improvements.** Either locally or in collaboration with neighboring towns, a plan to implement needed transportation improvements should be developed to coincide with milestones of development in the growth area.

All communities are encouraged to actively engage with neighboring or affected communities and MaineDOT by sharing results of traffic impact studies.

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4.2 Allow for operation and expansion of regional transportation facilities

Objective: To assure that regional transportation facilities are able to provide the required economic infrastructure to the State with as few conflicts as possible.

Description: Regional transportation facilities include: (1) Nearly 2,600 miles of interstate and rural arterial roads, including the Maine Turnpike, and related interchanges, (2) 36 publicly owned airports, (3) three major cargo ports (Portland, Searsport, and Eastport), (4) 1100 miles of rail, used primarily by three major freight carriers, and by Amtrak between Portland and Boston (see strategy **3.6 Prepare for Passenger Rail**), (5) intermodal terminals where trucks and rail can transfer freight, and (6) ferry terminals serving Maine's islands and transportation to Maritime Canada. Communities should consult with MaineDOT and the Maine Turnpike Authority concerning any master plans that govern the growth and operations of these regional and statewide facilities. For example, MaineDOT has an [Integrated Freight Plan](#), the State has identified a [Heavy Haul Truck Network](#), each airport maintains a master plan, and [Explore Maine](#) envisions an integrated transportation network for visitors.

At a minimum, community transportation plans should establish policies to:

- Limit land uses in the vicinity of regional facilities to those that are compatible with their operational realities. Allowable uses should be only those for which noise, vibrations, and diesel fumes, for example, will not constitute a nuisance. Conversely, the regulations should promote uses that can create synergies with the regional facilities.
- Along waterfronts, consider zoning that limits non-marine land uses to upper floors. See the [Maine Coastal Program](#) web site for resources to help keep waterfronts in tact.
- Incorporate the guidelines that may be included in the regional facilities' master plans concerning land use. For example, local policies should steer residential land uses clear of threshold noise contours identified in airport master plans. Local land use plans should anticipate the expansion needs of the regional facilities.
- Establish generous buffers between residential uses and interstate and arterial roads.
- Require new land uses that encroach within the impact areas of regional transportation facilities to provide noise barriers or incorporate sound resistant construction standards into their plans.

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- Where, due to the legacy of existing land uses, expansion of regional facilities will create conflicts, (1) work with MaineDOT or other operator of the facility to establish an acceptable operating plan, and (2) formally recognize the need for a mediating process that will enable the facility to grow while minimizing the impacts on the existing uses.

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4.3 Upgrade connectivity between industrial areas and the regional transportation system

Objective: To connect industrial activity to regional transportation facilities upon which the activity depends.

Description: Many communities have or are considering designated industrial areas that may or may not have appropriate connections to the regional transportation system. Often access to industrial parks is through downtowns or along local streets as these are the only connections to areas suited for industrial park use (near rail lines, available space, etc.).

Communities can use the following approaches to provide connectivity between industrial areas and regional transportation systems.

- Identify a designated, preferred route that hugs the state’s mapped Heavy Haul Truck Network and the closest route possible between the industrial area and the network. This route should be clearly designated on town maps, along the route itself, and should be identified to business owners within the industrial area. Once designated, communities can work independently or in collaboration with MaineDOT to upgrade connections (turning radii, pavement base, etc.) if necessary along the designated route. The identified route should avoid, to the extent possible, all downtown and neighborhood areas and should utilize the highest level roadway possible (arterials, connectors).
- If your community is a shipping port or a base of operations for truck, rail or air freight, identify potential “freight intermodal connectors.” These are typically short segments of roads that connect one mode of freight to another mode (e.g., sea to rail, rail to trucks). As listed in MaineDOT’s [Integrated Freight Plan](#) (2007), The Federal Highway Administration recognizes 14 freight intermodal connectors in Maine in Auburn, Bangor, and Portland. The State has recommended additions in Searsport, Eastport, and Brunswick.
- Designate industrial areas adjacent to regional transportation systems (interchanges, rail lines, ports). For communities looking to develop industrial areas, these should be located immediately adjacent to regional transportation system so that impacts to communities are limited. See also **4.2 Allow for operation and expansion of regional transportation facilities.**
- Encourage businesses with shipping needs to work with MaineDOT for funds under the State’s Industrial Rail Access Program (IRAP). This program provides matching funds to businesses looking to upgrade siding, switches, and other rail infrastructure to move product by rail.